Mycotoxins and Disease: A key, but scientifically flawed new paper for proving plaintiff cases ICTM Electronic Report Vol.2, No.5

A recent study by Croft et al "Clinical Confirmation of Trichothecene Mycotoxicosis in Patient Urine" *Journal of Environmental Biology*. Vol. 23 (3), 2002, pp 301-320 has been published. It appears, on its surface, to provide compelling scientific evidence of inhalational mycotoxin disease in individuals residing in contaminated residences. It also strongly argues that urine tests for trichothecene mycotoxins are the new gold standard for assessing causation and linking symptoms or diseases to indoor environments. This extensive study, replete with citations, experimental elements and, ultimately, farreaching interpretations is both dramatic and highly useful for plaintiff claims. The problem is that this "study" is so replete with fundamental scientific and methodological errors that its conclusions range from speculations, to sheer nonsense. A brief overview of this very important "study" will be provided here. A more complete review of its fatal scientific flaws will be discussed in subsequent reports. *This is a study which must be throughly understood by attorneys—plaintiff and defense—who deal with mold-related personal injury claims*.

Dr. Croft, a veterinarian, is the lead author. He describes four cases of individuals in detail and hundreds of others from an apartment complex, allegedly living in mold-contaminated environments, who purportedly fit the diagnosis of "trichothecene mycotoxicosis." Using a variety of tests (including an unusual skin patch test) and urine extraction of alleged trichothecenes, he "confirms" exposure. Injecting rats with the urine extract produces "similar disorders" further supporting his claims. A described autopsy of a deceased subject adds to the impact of his claims.

This paper appears to the non-scientist to be a careful, thorough study. Its conclusions seem strong and well-founded. Every disease and symptom from aneurysms to pancreatic and prostate cancer through every one of at least fifty symptoms, are claimed to arise from trichothecene intoxication. Notwithstanding its peer-reviewed status and seeming validity, its flaws are so manifest that they will require careful dissection in reports to follow. A few key errors include:

No controls;

A claim, but no valid confirmation, of mycotoxin presence in the urine or the bloodstream;

The use of novel, ill-supported tests;

Attribution of every imaginable symptom and disease to the alleged exposure, with no consideration of other far more likely, alternate causes;

Failure to consider normal dietary sources of trichothecenes;

There are many more.

Further analysis will follow in subsequent reports.